

Survival, Habitat Use, and Movements of Female Mallards

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Partners:

Louisiana Dept. of Wildlife & Fisheries

Ducks Unlimited Inc.

U.S. Fish & Wildlife Service through Gulf Coast JV

USGS-LA Cooperative Fish & Wildlife Research Unit

Where were the Ducks?



Flyway Issues

- Continental duck populations
- Weather
- Changes in agricultural practices
- Hunting pressure effects
- Others

Local and Regional Issues

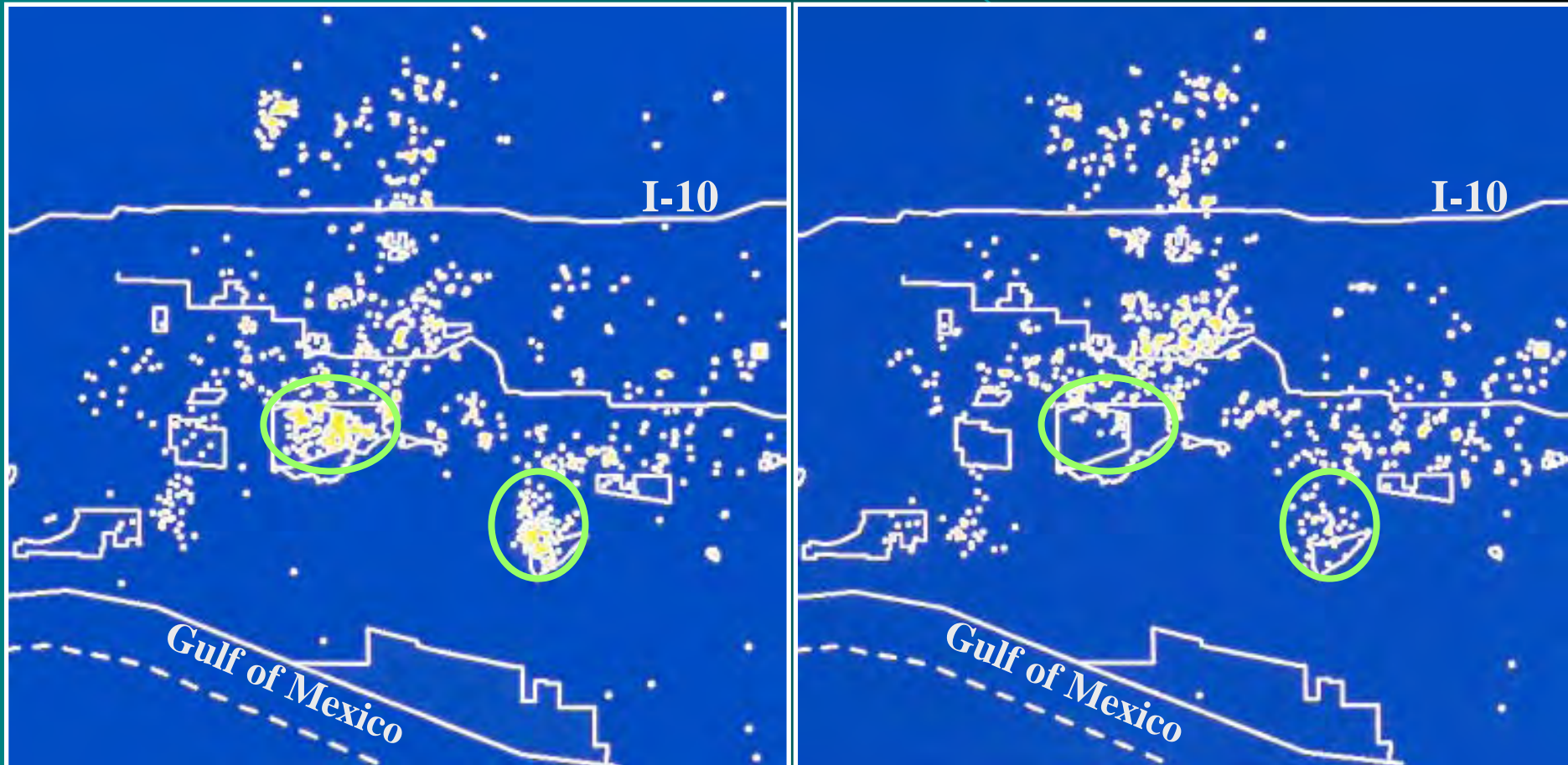
- Refuge use
- Habitat changes
- Effects of hunting pressure on duck behavior

Radio-tagged Pintail Locations

1991-92 & 1992-93

Diurnal

Nocturnal



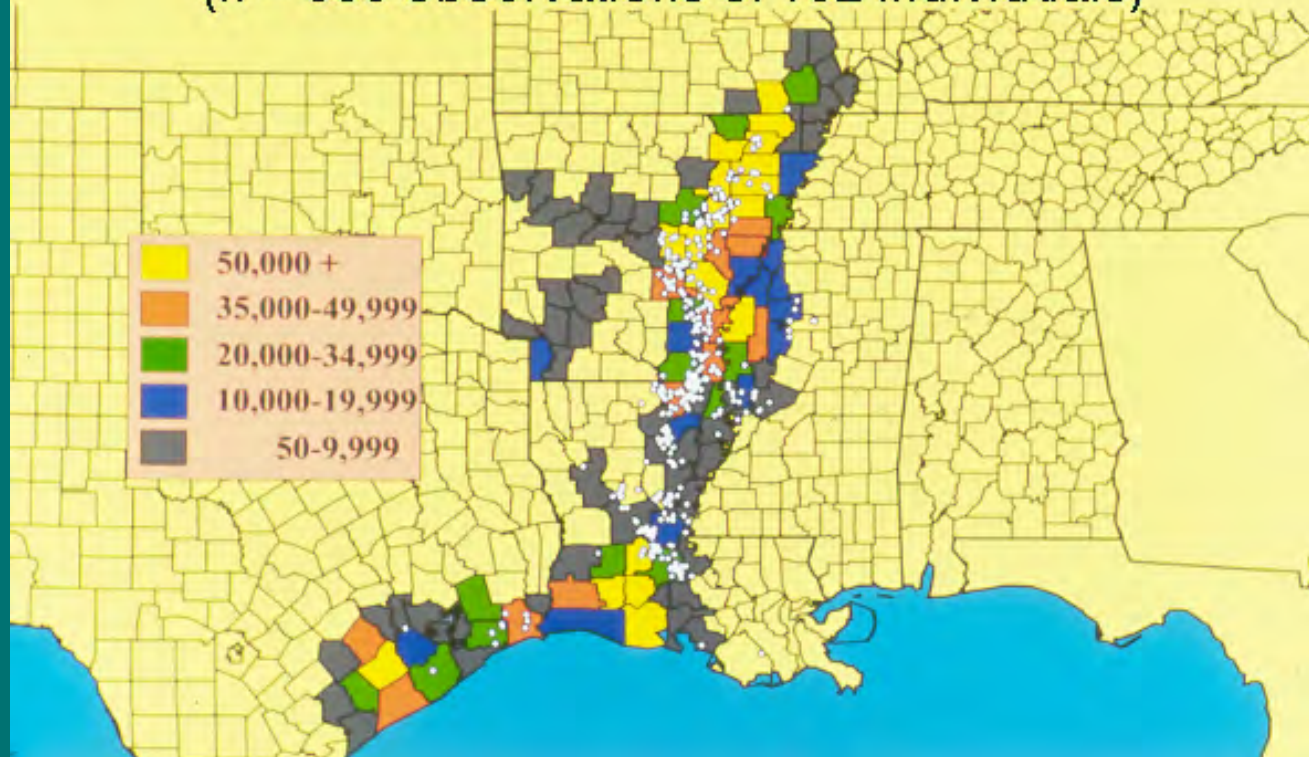
Cox, R. R. & A.D. Afton. 1998. Use of mini-refuges by female northern pintails wintering in southwestern Louisiana. *Wildlife Society Bulletin* 26(1):130-137.

Pintail Long-range Movements

Primary Study Area and Search Area



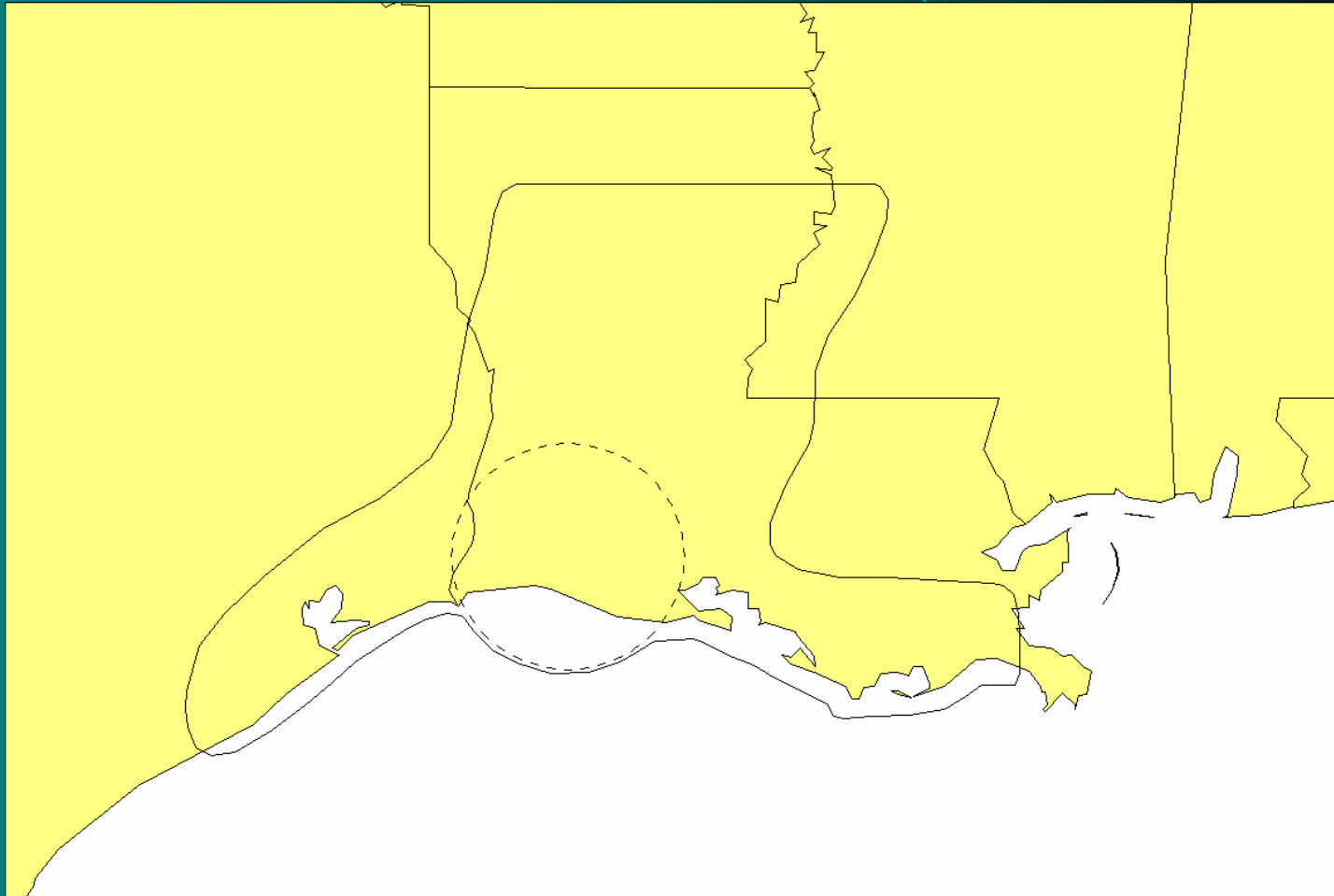
Pintail Locations in Relation to Rice - All Winters
(n = 556 observations of 152 individuals)



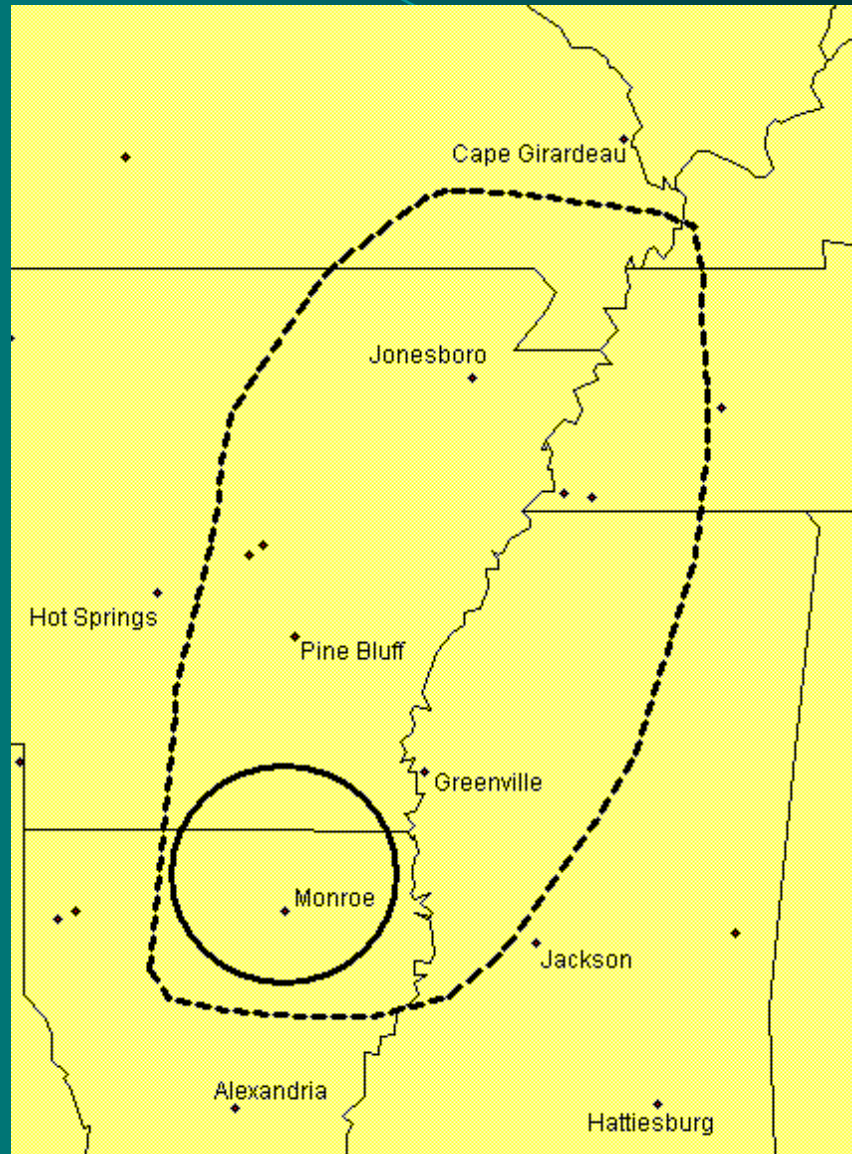
Mallard Study Objectives

- Document local & long-range movements
- Describe diurnal & nocturnal habitat use
- Estimate **female** survival during winter
- Identify factors affecting movements, habitat use & survival
- Where possible, compare historical and current data

SW Louisiana Study Site

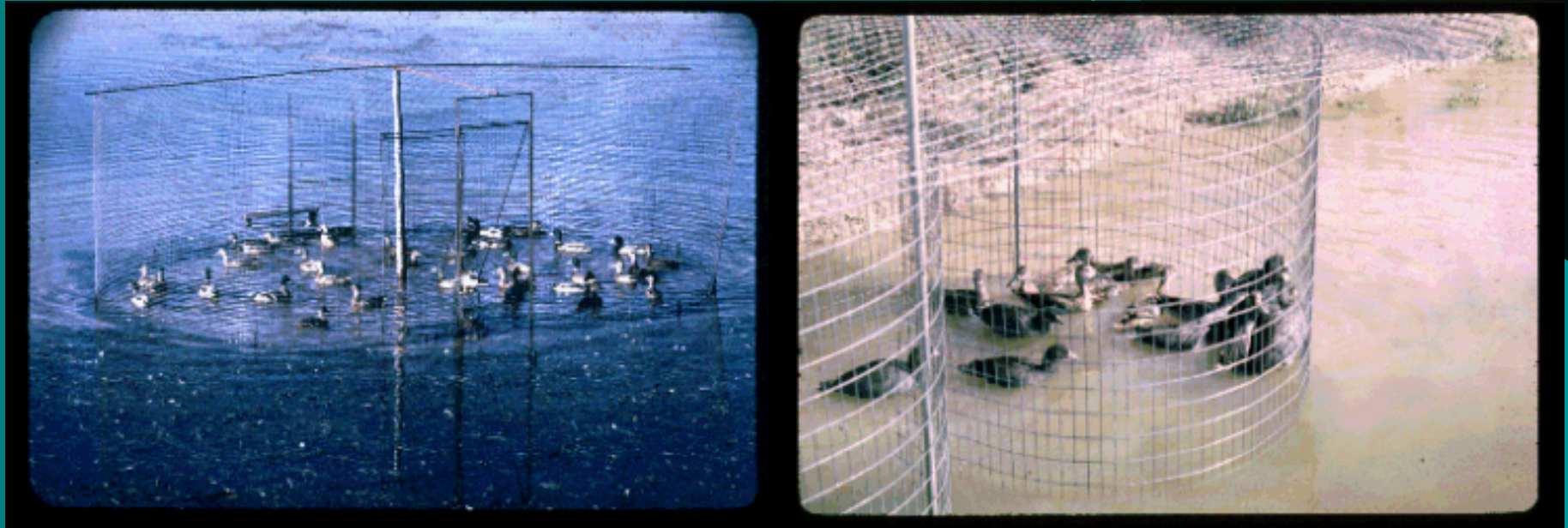


NE Louisiana Study Site



Trapping Techniques

Swim-In Bait Traps



Trapping Techniques

Rocket Nets



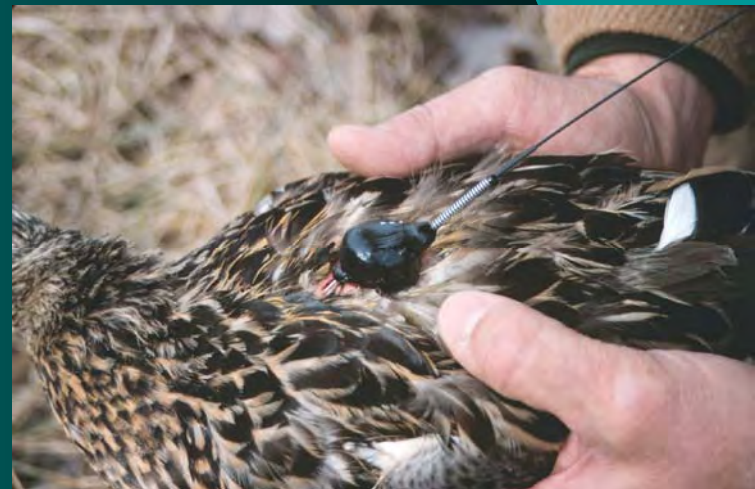
Trapping Techniques

Rocket Nets

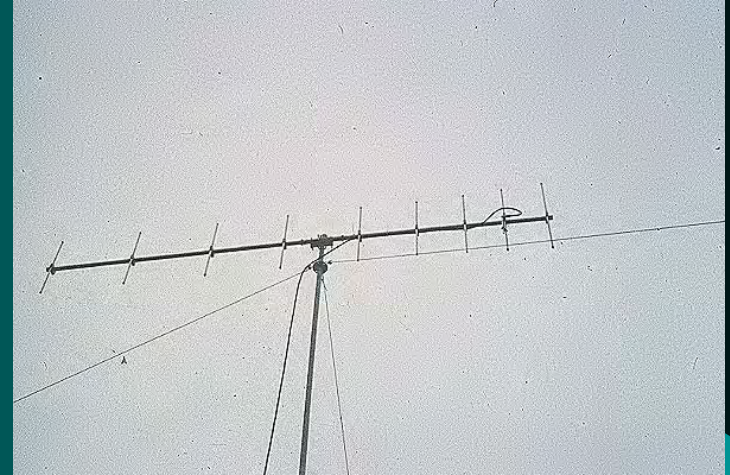


Satellite vs. VHF Radios

- Weight and size
- Cost
- Accuracy



Radio-Telemetry Techniques



Radio-Tracking Effort

- Habitat Use
 - 50 mi radius Core Areas (SW and NE LA)
 - 8 locations/week/female (4 day, 4 night)
- Migration Rates and Long-range Movements
 - weekly “lost bird” flights
- Survival
 - overall estimates and within each core area

